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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/772,482	02/05/2004	Yibei Ling	APP 1484	4980

7590

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EXAMINER
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ZEWDU, MELESS NMN

ART UNIT	PAPER NUMBER
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2683

DATE MAILED: 06/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/772,482

Applicant(s)

LING ET AL.

Examiner

Meless N Zewdu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

### DETAILED ACTION

1. This action is the first on the merit of the instant application.
2. Claims 1-20 are pending in this action.

#### *Drawings*

The drawings are objected to because figs. 1-2 are labeled as "Verizon CDPD network connectivity" and figs. 3-4 are labeled as "Verizon CDMA connectivity". Examiner is not clear as to what this labeling is to mean. Until clarification is provided, it is considered as an indication of a prior art admission and hence need to be properly labeled as "**Prior Art**". Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the

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examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 20 recites the limitation "the point that file loading was stopped because of said handoff" in lines 3-4. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**Claims 8 and 10 are rejected under 35 U.S.C. 102(e) as being anticipated by**

**Gao et al. (Gao) (US 2004/0067754 A1).**

**As per claim 8:** Gao discloses a method of handing off a user device from a first network to a second network (see abstract), said method comprising:

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establishing a session on said user device with said first network (see abstract).

Established a session on a user device is inherent in a handover procedure.

determining that said user device is in an area where said first network and said second network overlap (see page 3, paragraphs 0026- 0027, 0030; page 4, paragraph 0036; page 5, paragraph 0043). Since, the handover procedure, in the prior art takes place when the mobile device is in the overlapping area of two networks, the fact that the mobile device is in that area must have been determined before the handover takes place.

handing off said user device from said first network to said second network (see abstract; page 4, paragraph 0036; claims 15 and 16).

**As per claim 10:** a method, wherein said second network operates at a higher bandwidth than said first network (see page 5, paragraph 0049). The prior art's network can supports varying handover requirements including bandwidth requirement to maintain QOS. In other words, if the quality of service at the current bandwidth is not suitable to a user, it can be changed to another bandwidth (including from lower to higher or from higher to lower).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goa in view of Wu (US 2002/0082015 A1).**

**As per claim 1:** the limitations of claim 1 are similar to the limitations of claim 8, except one difference, as provided below. Hence, the similar limitations of claim 1 are rejected on the same ground as claim 8. But, regarding the difference, limitation, Gao does not explicitly teach about a proxy for use with a user device operating in a heterogeneous wireless network environment, as claimed by applicant. However, in a related field of endeavor, Wu teaches about method and system that include at least one proxy operating in a heterogeneous wireless network environment (see entire document, particularly, abstract; fig. 1, elements 111 and 112; page, paragraph 0008-page 2, paragraph 0020; page 2, paragraph 0028-page 3, paragraph 0029). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the teaching of Gao with that of Wu for the advantage of transferring a communication session from one service area to another in a format that is suitable to a mobile device (see page 1, paragraphs 0001-0003).

**As per claim 3:** Gao teaches a method, wherein said second network operates at a higher bandwidth than said first network (see page 5, paragraph 0049). The prior art's network can support varying handover requirements including bandwidth requirement to maintain QOS. In other words, if the quality of service at the current bandwidth is not suitable to a user, it can be changed to another bandwidth (including from lower to higher or from higher to lower).

**Claims 14, 15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gao in view of Wu and Labun et al. (Labun) (US 6,842,621 B2).**

**As per claim 14:** Gao discloses an architecture for use in a heterogeneous network environment (see figs. 2 and 5; abstract), said architecture comprising:

a user device (see fig.2, element 120; page 2, paragraph 0020). But, Gao does not explicitly teach about a user device having an installed web browser and a web browser, as claimed by applicant. However, in a related field of endeavor, Labun teaches a communication system wherein a mobile device is provided a WAP browser to browse a web server (see fig. 1, elements 102, 104 and 108, 122; abstract; col. 1, lines 15-col. 2, line 37; col. 2, line 63-col. 3, line 47; col. 4, lines 28-42). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify Gao's mobile device with that of Labun for the advantage of browsing the internet via a mobile communication device, as taught by Labun (see col. 1, lines 15-52). But, Gao in view of Labun does not explicitly teach a proxy interposed between said web browser and said web server; and an information gateway interposed between said proxy and said web server, as claimed by applicant. However, in a related field of endeavor, Wu teaches about a communication's architecture wherein a proxy is interposed between a web browser and a web server, including an information gateway interposed between the proxy and the web server (see fig. 1, elements 104 (mobile with browser), 111 (proxy), 103 (gateway) and 105 (server); page 2, paragraph 0028-page 3, paragraph 0029; page 3, paragraph 0032; page 3, paragraph 0039-page 4, paragraph 0040). Therefore, it would have been obvious for one of ordinary skill in the art at the

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time the invention was made to further modify the above references with the teaching of Wu for the advantage of transferring communication session from one service area to another (see abstract; page 1, paragraphs 0001-0003).

**As per claim 15:** the features of claim 15 are similar to the features of claim 1. Hence, claim 15 is rejected on the same ground and motivation as claim 1.

**As per claim 17:** Gao teaches a method, wherein said second network operates at a higher bandwidth than said first network (see page 5, paragraph 0049). The prior art's network can supports varying handover requirements including bandwidth requirement to maintain QOS. In other words, if the quality of service at the current bandwidth is not suitable to a user, it can be changed to another bandwidth (including from lower to higher or from higher to lower).

**Claims 2, 9 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references applied to claim 1 above, and further in view of Dilman et al. (Dilman) (US 2002/0138599 A1).**

**As per claim 2:** but, the above references do not explicitly teach about means combining both event driven and polling-based schemes for detecting changes in network conditions. However, in a related field of endeavor, Dilman teaches about a network monitoring means/technique that combines both event driven and polling schemes (see abstract). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to further modify the above references for the advantage of significantly reducing the amount of monitoring traffic (see abstract).



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**As per claim 9:** the features of claim 9 are similar to the features of claim 2. Hence, claim 9 is rejected on the same ground and motivation as claim 2.

**As per claim 16:** the features of claim 16 are similar to the features of claim 2. Hence, claim 16 is rejected on the same ground and motivation as claim 2.

**Claims 4-5, 11 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references applied to the claims above, and further in view of Millad et al. (Millard) (US 2003/0093341 A1).**

**As per claim 4:** the above references do not explicitly teach about a proxy comprising means to track an ongoing session with said user, as claimed by applicant. However, in a related field of endeavor, Millard teaches about a mechanism for tracking traffic statistics on a per packet basis, wherein a network processor subsystem is used to track a particular session of a communication by counting the number of bytes received by the network processor subsystem (see page 1, paragraph 0008-page 3, paragraph 0023, particularly page 2, paragraph 0016-page 3, paragraph 0023; page 6, paragraph 0057). Note: examiner considers the claimed proxy as functionally similar to the immediate prior art's network processor subsystem. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to further modify the above references with the teaching of Millard for the advantage of providing a gateway to track traffic statistics on a per packet basis to enable a variable price billing whereby a customer may balance its data traffic in response to such billing (see page 1, paragraph 0006-0007).

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**As per claim 5:** Millard teaches a proxy (network processor subsystem) wherein the tracking means is a byte counter (see page 6, paragraph 0057).

**As per claim 11:** the feature of claim 11 is similar to the feature of claim 4. Hence, claim 11 is rejected on the same ground and motivation as claim 4.

**As per claim 18:** the feature of claim 18 is similar to the feature of claim 4. Hence, claim 18 is rejected on the same ground and motivation as claim 4.

**As per claim 19:** the feature of claim 19 is similar to the feature of claim 5. Hence, claim 19 is rejected on the same ground and motivation as claim 5.

**As per claim 20:** the feature of claim 20 is similar to the features of claims 14 and 15. In other words, the architecture is as provided in claim 14 and the handoff/handover feature is as provided in claim 15. Furthermore, the claim indicates communication was broken or interrupted during handover. In view of that, the prior art is found to be advantageous since it does not include interruption of communication during handoff. Hence, applicant's claim of –beginning file loading at the point that file loading was stopped because of said handoff--, is obviated by the prior art's advantageous feature. Therefore, claim 20 has been rejected on the same ground and motivation as claims 14 and 15.

**Claims 6 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references applied to the claims above, and further in view of Lemon et al. (Lemon) (US 2002/0156881 A1).**

**As per claim 6:** the above references do not explicitly teach about tracking http session, as claimed by applicant. However, in a related field of endeavor, Lemon

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teaches about monitoring HTTP transaction/session taking place between a server and a client (see abstract; page 3, paragraph 0050-0052). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to further modify the above references for the advantage of monitoring the flow of data in a web application (see page 3, paragraph 0051).

**As per claim 12:** the feature of claim 12 is similar to the feature of claim 6. Hence, claim 12 is rejected on the same ground and motivation as claim 6.

**Claims 7 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references applied to claims above, and further in view of Capriotti et al. (Capriotti) (US 6,748,056 B1).**

**As per claim 7:** but, the above references do not explicitly teach about a proxy (network processor subsystem) that includes a SNMP session, a POP3 session, an IMAP session, or a streaming session. However, in a related field of endeavor, Capriotti teaches about a coordination of a telephony handset session with an e-mail session in a universal messaging system using a POP3 session protocol (see col. 11, lines 47-65).

Note: when the references are combined as shown above, the POP3 session will be tracked/monitored, as discussed in the rejection of claim 4. Although there are multiple features recited in claim 7, only one needs to be satisfied and hence, POP3 is provided. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to further modify the above references with the teaching of Capriotti for the advantage of the handset to conduct session with the an e-mail server.

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**As per claim 13:** the features of claim 13 are similar to the features of claim 7. Hence, claim 13 is rejected on the same ground and motivation as claim 7.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Meless N. Zewdu whose telephone number is (571) 272-7873. The examiner can normally be reached on 8:30 am to 5:00 pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on (571) 272-7872. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Meless Zewdu

Examiner

10 June 2005.

M. Z.

  
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